

ABSTRACT

A compressing device comprises plural stages of delay circuits (1.<sub>1</sub> to 4.<sub>1</sub>) and multiplying/adding circuits (5.<sub>1</sub> to 10.<sub>1</sub>) that performs weighted addition of output data from the delay circuits (1.<sub>1</sub> to 4.<sub>1</sub>) according to the value of a digital basic function and thereby determines thinned-out data from sampling data sequentially inputted. Since the thinned-out data is determined by the compression part using a digital basic function serving as the original of a sampling function of infinite supports defferentiable once or more times over thewholerange, acompressionratio of at lease 8 can be achieved only by the simple four operations. Further, since interpolation data is determined by the decompression part by using the same digital basic function, the original data before the compression can be reproduced with substantial fidelity by only the simple four operations.